

RECENT LITERATURE.

McAtee's 'Woodpeckers in Relation to Trees and Wood Products.'

— In this valuable and interesting publication¹ Mr. McAtee treats exhaustively a subject upon which there has been much need of authentic information. First is considered the damage done by Woodpeckers in general, to trees, telegraph poles and buildings, in excavating for nests — damage which can usually be prevented by furnishing artificial nest boxes and which rarely or never calls for the destruction of the birds. Furthermore the benefit conferred by Woodpeckers, exclusive of the Sapsuckers, in destroying insects, far more than compensates for the damage they do. With the Sapsuckers however, the case is different, and the bulk of Mr. McAtee's report is taken up with a discussion of the depredations of the Yellow-bellied and Red-breasted Sapsuckers (*Sphyrapicus varius* and *ruber*) and their geographic races. The evidence presented seems fully to warrant the author's conclusion, that these birds should be included in the class of injurious species and destroyed whenever caught redhanded. The status of Williamson's Sapsucker (*S. thyroideus*) is still in doubt owing to lack of information. The various species of trees and vines attacked by the Sapsuckers are listed systematically with comments on the character and extent of the damage inflicted, and with numerous excellent illustrations.

In puncturing the bark to reach the sap the birds injure the cambium layer, causing irregularities of growth and distortion of the grain of the wood. Furthermore the punctures admit moisture, bacteria, fungi, etc., which produce stains or decay, rendering the lumber valueless for ornamental or other special uses and sometimes causing the death of the tree.

The annual loss resulting from the Sapsucker's attacks in the United States exceeds a quarter of a million dollars. Mr. McAtee accompanies his condemnation of the Sapsuckers with a word of warning to the effect that "great care should be exercised to distinguish the real offenders, as there are twenty species of Woodpeckers in the United States and only two are under indictment."

Two excellent colored plates by Fuertes illustrate the several species of Sapsuckers, and add to the value and attractiveness of this excellent bulletin.— W. S.

Forbush on the Starling in America.²— In June, 1910, through the coöperation of the Bureau of Biological Survey, U. S. Department of Agri-

¹ Woodpeckers in Relation to Trees and Wood Products. By W. L. McAtee. Bulletin No. 39. Biological Survey, U. S. Department of Agriculture. Issued September 26, 1911.

² Annual Report of the State Ornithologist for the year 1910. Massachusetts State Board of Agriculture. July 11, 1911.